

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Canceled)

10. (Currently Amended) A method for producing a single crystal by Czochralski method withby pulling a seed crystal from a raw material melt, comprising:

immersing a seed crystal into a raw material melt; and

growing a single crystal by rotating and pulling the seed crystal,

wherein the single crystal is pulled with controlling a value of V/G
(mm²/K • min) within a determined range, and the range of a value of V/G (mm²/K • min),
including a desired defect region and/or a desired defect-free region, is determined according
to Tmax (°C), wherein:

V(mm/min) is the single crystal pulling rate of pulling a single crystal;

G (K/mm) is a temperature gradient at a solid-liquid interface, in a range of the
melting point of the raw material and 1400°C; and

Tmax (°C) is the highest temperature of the raw material melt at an interface between
a quartz crucible inner wall and a raw material melt.

wherein when a pulling rate of pulling a single crystal is defined as V (mm/min), a
temperature gradient at a solid-liquid interface is defined as G (K/mm) and a highest
temperature at an interface between a crucible and a raw material melt is defined as Tmax
(°C), at least, a range of a value of V/G (mm²/K • min) including a desired defect region
and/or a desired defect-free region is determined according to the Tmax (°C), and the single
crystal is pulled with controlling a value of V/G (mm²/K • min) within the determined range.

11. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of V/G

(mm²/K • min) in a range from $-0.000724 \times \text{Tmax} + 1.31$ to less than $-0.000724 \times \text{Tmax} + 1.38$.

12. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of V/G (mm²/K • min) in a range of $-0.000724 \times \text{Tmax} + 1.38$ or more.

13. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with controlling the value of V/G (mm²/K • min) in a range from $-0.000724 \times \text{Tmax} + 1.31$ to $-0.000724 \times \text{Tmax} + 1.35$.

14. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with the Tmax (°C) being in a range of 1560 °C or less.

15. (Previously Presented) The method for producing a single crystal according to Claim 11, wherein the single crystal is pulled with the Tmax (°C) being in a range of 1560 °C or less.

16. (Previously Presented) The method for producing a single crystal according to Claim 12, wherein the single crystal is pulled with the Tmax (°C) being in a range of 1560 °C or less.

17. (Previously Presented) The method for producing a single crystal according to Claim 13, wherein the single crystal is pulled with the Tmax (°C) being in a range of 1560 °C or less.

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

19. (Previously Presented) The method for producing a single crystal according to Claim 11, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

20. (Previously Presented) The method for producing a single crystal according to Claim 12, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

21. (Previously Presented) The method for producing a single crystal according to Claim 13, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

22. (Previously Presented) The method for producing a single crystal according to Claim 14, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

23. (Previously Presented) The method for producing a single crystal according to Claim 15, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

24. (Previously Presented) The method for producing a single crystal according to Claim 16, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

25. (Previously Presented) The method for producing a single crystal according to Claim 17, wherein, at least, the Tmax (°C) is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

26. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein a silicon single crystal is pulled as the single crystal.

27. (Previously Presented) The method of producing a single crystal according to Claim 10, wherein a single crystal with a diameter of 200mm or more is pulled as the single crystal.

28. (Canceled)